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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,696	08/02/2005	Gerhard Schinzel-Reiner	2732-160	8531

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EXAMINER	
CICCHINO, PATRICK D	

ART UNIT	PAPER NUMBER
3653	

NOTIFICATION DATE	DELIVERY MODE
08/31/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/523,696	SCHINZEL-REINER ET AL.	
	Examiner	Art Unit	
	Patrick Cicchino	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18-20* is/are rejected.

7)☒ Claim(s) *17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is a response to the applicant's amendment dated 6/12/2009 where claims 1-20 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 12, 13, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al (US Pat No 5,697,609).

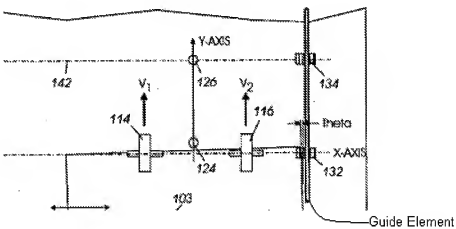
Regarding claims 1 and 3, Williams discloses a device for detecting the alignment of a sheet (124, 126, 130, 132, and 134) being transported separately in the transport system, a device for determining, from the detected alignment, a deviation (i.e. controller 29) of the single sheet from a desired alignment where the edges of the sheet are parallel to the transport direction, and a means for aligning (i.e. 100) the sheet in the desired alignment by displacing the sheet in a direction deviating from the transport direction (i.e. via rolls 106, 114 and 116) of the transport system wherein the means for aligning is controlled by the device for determining deviation, wherein the device fro detecting the alignment detects the alignment of the sheet in the area of the means for aligning wherein the alignment is checked during the aligning (as shown in figures 3 and 4) and the device for determining a deviation stops the means for aligning as soon as the single banknote has the desired alignment (i.e. when the deviation from the desired alignment is not present, the sheet is fed normally).

Regarding claim 4, Williams discloses the device for detecting the alignment detects a two-dimensional area (i.e. x and y axis, shown in figures 3 and 4).

Regarding claim 5, Williams discloses the means for aligning mechanically acts on the sheet (as shown in figures 3 and 4).

Regarding claim 6, Williams discloses the means for aligning has at least one roller, which aligns the sheet by displacing the sheet in a direction deviating from the transport direction (i.e. via rolls 106, 114 and 116).

Regarding claim 12, Williams discloses a guiding element (shown below, a cutout of figure 4) against which the sheet is directed by the means for aligning, the guiding element having the desired alignment (shown in figure 4).



Regarding claim 13, Williams discloses the controller counts the number of sheets (as disclosed in column 6, line 57 through column 7, line 7).

Regarding claims 18 and 19, Williams discloses displacing the banknote in a direction substantially orthogonal to the transport direction (disclosed in column 7, lines 37-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al.

Regarding claim 20, Williams discloses the rollers are capable of swinging side to side. Williams fails to distinctly disclose the amount of which the rollers can swing (i.e. to what degree). It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to have made the amount to which the rollers can swing to be substantially orthogonal to the transport direction for the purpose of moving the sheet by that magnitude in a direction orthogonal to the transport direction.

Claims 2, 10, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al in view of Ek (US Pat No 5,755,437).

Regarding claims 2 and 10, it is noted that Williams fails to disclose the transport being slowed down or stopped to change the distance between sheets. However, Ek discloses the use of slowing, stopping or reversing the direction of feed if a bank note is received prematurely or sped up if a bank note is received too late (as shown in column 4, lines 28-56). It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to have modified the aligning apparatus taught by Williams with the slowing, speeding or stopping

of a following sheet for the purpose of ensuring a timely, accurate alignment of each individual sheet.

Regarding claim 11, Ek discloses the slowing of the bank note is done mechanically (as shown in figures 3 and 4).

Regarding claim 14, Ek discloses aligning banknotes with means for checking bank notes of a bank-note processing machine.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Gerlier (US Pat No 5,140,166).

Regarding claim 7, it is noted that Williams fails to specifically disclose the means for aligning having a component to remove the means for aligning from the single bank note. However, Gerlier discloses means for lifting (41) a means for aligning from the sheets being conveyed (as shown in figure 4, and lines 51-66). It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to have modified the means for aligning taught by Williams with the lifting device taught by Gerlier for the purpose of avoiding over-alignment (i.e. more skew) to take place.

Claims 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al in view of Craft (US Pat No 3,918,706).

Regarding claim 8, it is noted that Williams fails to disclose the use of a non-contacting aligning means. However, Craft reveals the use of a pneumatic device in order to align sheets which act in a non-contacting fashion (as shown in figure 1 and the abstract). It would have been

obvious to one having ordinary skill in the art at the time the invention was made to have modified the alignment device of Williams with the pneumatic aligning device taught by Craft for the purpose of simplifying the alignment and transport of a sheet (i.e. reduction of movable/breakable parts).

Regarding claim 9, Craft et al discloses the use of an airflow that will transport the sheet in a direction deviating in the direction of transport (as shown in figure 1).

Regarding claim 12, as best understood, Craft discloses the use of a guiding member (14) so that the sheet has something to abut against in the aligning process which is aligned (as shown in figure 1).

Claim15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al in view of Forch et al (US Pub No 2001/0040331).

Regarding claim 15, it is noted that Williams discloses the sensor as a CCD sensor. However, Forch discloses a position detection device as having a CCD-array Camera. It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to have used a CCD-array camera taught by Forch in place of the CCD sensor disclosed by Williams to detect the position of a sheet along an array of the CCD cameras.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al in view of Suga et al (US Pat No 6,059,285).

Regarding claim 16, Williams discloses having rollers (106) not parallel to the transport direction. It is noted that Williams fails to disclose a pair of rollers on opposing sides of the

sheet. However, Suga discloses a similar aligning apparatus wherein the pair of rollers contact opposing surfaces of the sheet (as shown in figures 1 and 3). It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to have modified the aligning means taught by Williams with the pair of rollers on opposing surfaces of the sheet for the purpose of having a better grip on the sheet to move it in a direction deviating to the transport direction (i.e. more control).

Allowable Subject Matter

Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior art discloses a pneumatic sheet aligning device which uses sensors to determine the amount of deviation along with the pneumatic device stopping before the sheet is aligned to allow inertia to complete the aligning process.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Cicchino whose telephone number is (571)270-1954. The examiner can normally be reached on Monday-Friday, 8:00-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/
Supervisory Patent Examiner, Art Unit 3653

/P. C./
Examiner, Art Unit 3653